

## COMMUNICATION PROCESSING DEVICE

### Abstract

A method for processing a data signal, for instance, a data signal encoding a data bit stream which carries a sequence of data packets. The method includes accepting a protocol specification that includes specification of a number of elements, each specification including a length and a name, and optionally internal structure and actions. For instance, the elements are sub-packets or data fields. The method also includes accepting a series of data packets and for each accepted packet, associating portions of the input packet with elements specified in the protocol specification. For each of the associated portions of the input packet, the method includes performing actions included in the specification of elements associated with that portion of the input packet, for example by use of a subroutine call or passing a data message.